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TWO NEW SPECIES OF THE INDO-WEST PACIFIC
GENUS *CHORISQUILLA* (CRUSTACEA,
STOMATOPODA), WITH NOTES ON
C. EXCAVATA (MIERS)

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In 1972 I visited the Zoological Survey of India (Indian Museum), Calcutta, to study their extensive collection of types and other specimens of Indo-West Pacific stomatopods. Among the materials examined were 3 lots from the Andaman Islands that had been identified by Kemp (1913) with *Gonodactylus excavatus* Miers, 1880, the type-species of *Chorisquilla*. Earlier I had examined material from several Indo-Malayan localities in the Zoological Museum, Amsterdam that had been identified with the same species by Hansen (1926) and Holthuis (1941), and I had noted discrepancies in the published accounts of the species. In April 1973 I studied the holotype of *C. excavatus*, from an unknown locality, and additional specimens from the South China Sea that had been identified with that species by Pocock (1893) in the collection of the British Museum (Natural History). The specimens reported by Kemp proved to be a new species and those reported by Pocock, Hansen, and Holthuis represent a second new species. These two new species are described below, and a brief description of the unique type of *C. excavata* is included.

In the descriptions given below, particular attention is given to characters afforded by the sixth abdominal somite and telson. Except for those parts of the body, all of the species of *Chorisquilla* are very similar. Characteristics of the genus were summarized in an earlier paper (Manning, 1969).

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Chorisquilla excavata (Miers, 1880)

Figure 1a-b

Gonodactylus excavatus Miers, 1880: 123, pl. 3, figs. 11-12.

Protosquilla excavata.—Brooks, 1886: 78 (listed; diagnosis from Miers, 1880).

not *Gonodactylus excavatus*.—Gravier, 1937: 209, fig. 23.—Serène 1939: 349 (discussion).—Dawydoff, 1952: 145, 146 (discussion).—Serène, 1953: 507; 1954: 53 (discussion) (= *Haptosquilla glyptocercus* (Wood-Mason)).

Material: Locality unknown; holotype, 1 ♂, total length (TL) 19 mm; BMNH 75.14.

Diagnosis: Sixth abdominal somite (Fig. 1a) with 6 longitudinal bosses, submedians and intermediates unarmed, intermediates irregular in shape. Posterolateral angles of sixth abdominal somite forming sharp spines. Telson (Fig. 1a) slightly broader than long, with 5 smooth longitudinal bosses dorsally. Median boss (Fig. 1a) tapering posteriorly, extending almost to median cleft in posterior margin. Submedian bosses smooth, terminating at base of submedian marginal tooth. Marginal bosses smooth, extending to apex of intermediate teeth. Lateral margins of dorsal bosses smooth, lacking any trace of vertical furrows characteristic of *C. pococki*, new species and *C. andamanica*, new species. Marginal teeth of telson well separated, with broad but sharp apices; submedians with movable apices arising submarginally. 7 pairs of submedian (Fig. 1a) and 2 pairs of intermediate denticles present.

Remarks: *Chorisquilla excavata* differs from both *C. pococki*, new species and *C. andamanica*, new species in several characters: there are smoother bosses on the sixth abdominal somite and telson; the median boss of the telson extends almost to the anterior edge of the median incision in the telson margin; the apices of the marginal teeth of the telson are sharp; and there are only 7 pairs of submedian denticles. It further differs from *C. andamanica* in having sharp posterolateral spines on the sixth abdominal somite.

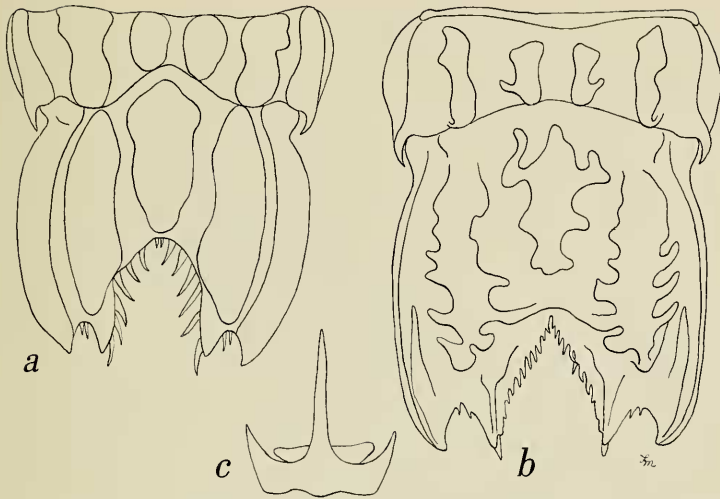


FIG. 1. *Chorisquilla excavata* (Miers), ♂ holotype: *a*, Outline of sixth abdominal somite and telson; *c*, Outline of rostral plate and ocular scales. *Chorisquilla pococki*, new species, ♂ paratype, Siboga sta. 133: *b*, Outline of sixth abdominal somite and telson. (Setae omitted).

Miers (1880, p. 123) clearly described the smooth longitudinal bosses on the telson which are shown in his illustration of the telson (pl. 3 fig. 12); however, his illustration was inaccurate in showing the intermediate marginal teeth of the telson extending well beyond the submedians. A camera lucida sketch of the telson of the holotype is given here (Fig. 1*a*); the marginal teeth, separated by a deep incision, extend to the same level.

The male holotype is now preserved dry; it could not be measured in detail. The type-locality is unknown. The specimen was among materials collected during the voyage of H.M.S. "Herald." Other material collected by the "Herald" and reported by Miers was from Bau, British Solomon Islands; Matuka and Conway Reef, Fiji Islands; and Shark's Bay, Western Australia. Presumably the species lives in the southwestern Pacific Ocean, but its range is unknown.

The specimens from Viet Nam reported and figured by Gravier (1937) are identifiable with *Haptosquilla glyptocercus* (Wood-Mason), as indicated by Serène (1954, p. 53). Inasmuch as Serène (1954, p. 6) did not include this species in his list of stomatopods from Viet Nam, it seems likely other earlier records of *C. excavata* from Viet Nam (Serène, 1939, 1953; Dawydoff, 1952) are based on Gravier's erroneous identification.

***Chorisquilla pococki*, new species**Figures 1*b*, 2

Gonodactylus excavatus.—Pocock, 1893: 476.—Odhner, 1923: 15.—Hansen, 1926, 36, pl. 2, fig. 4a.—Holthuis, 1941, 290.

Material: Macclesfield Bank, South China Sea; ♂ holotype, total length (TL) 17 mm; ♂ paratype, TL 12 mm; BM(NH) 92.8–28.9–10.—Same; ♀ paratype, TL 18 mm; BM(NH) 93.11.3.153.—Off Ampenan, west coast of Lombok, Indonesia; 13 fms (24 m); Van de Sande, col.; May 1909; ♂ paratype, TL 34 mm; ZMA.—Anchorage off Lirung, Salibabu Island, Talaud Islands, Indonesia; to 36 m; mud and hard sand; “Siboga” sta. 133; ♂ paratype, TL 14 mm; ZMA.—Anchorage between Nusa Besi (Ilhea de Jaco), and the northeast point of Timor, Portuguese Timor; 08°25.2’S, 127°18.4’E; 27–54 m; sand, coral and lithothamnion; “Siboga” sta. 282; ♂ paratype, TL 15 mm; ZMA.

Diagnosis: Fifth abdominal somite (Fig. 2*b*) smooth dorsally, with acute or sharply-spined posterolateral angles and 3 longitudinal grooves above margin. Sixth abdominal somite (Figs. 1*b*, 2*b*) with 3 pairs of dorsal bosses, submedians and intermediates unarmed, smooth dorsally, with irregular, eroded margins; lateral bosses smoother, each terminating in sharp posterolateral spine. Telson (Figs. 1*b*, 2*b*) length and width subequal (length greater in some specimens, width in others), appearing elongate, with 5 prominent longitudinal bosses on dorsal surface, smooth dorsally, margins of median and submedians very irregular, eroded. Median boss of telson not extending to anterior margin of median incision in telson. Submedian bosses (Figs. 1*b*, 2*b*) extending almost to bases of submedian teeth, posteriorly with transverse ridge extending to midline behind apex of median boss. Marginal bosses smooth, rounded dorsally, not furrowed laterally or mesially. Telson with 2 pairs of marginal teeth, apices well-separated by intermediate incision. Submedian teeth with distinct, sharp dorsal carina in small specimens, carina obscure in larger examples, apices of submedian teeth sharper than those of intermediates; submedian teeth each with movable submarginal spine. Broad intermediate tooth fusing with marginal carina in adults. 7–12 slender submedian denticles (Figs. 1*b*, 2*b*), fewer in larger specimens, and 2 intermediate denticles present (1 on largest male). Uropodal exopod with 9–10 blunt, movable spines on outer margin of proximal segment of exopod.

Measurements: Males (5), TL 12–34 mm; only female examined, TL 18 mm. Odhner (1923) reported a female 26.5 mm long. Other measurements, of male, TL 34 mm, in mm: carapace length 7.4; cornea width 1.7; rostral plate length 2.3, width 2.7; fifth abdominal somite width 6.2; telson length 5.7, width 5.9.

Remarks: *Chorisquilla pococki* resembles *C. excavata* in basic facies and it is not too surprising that earlier authors did not recognize it as

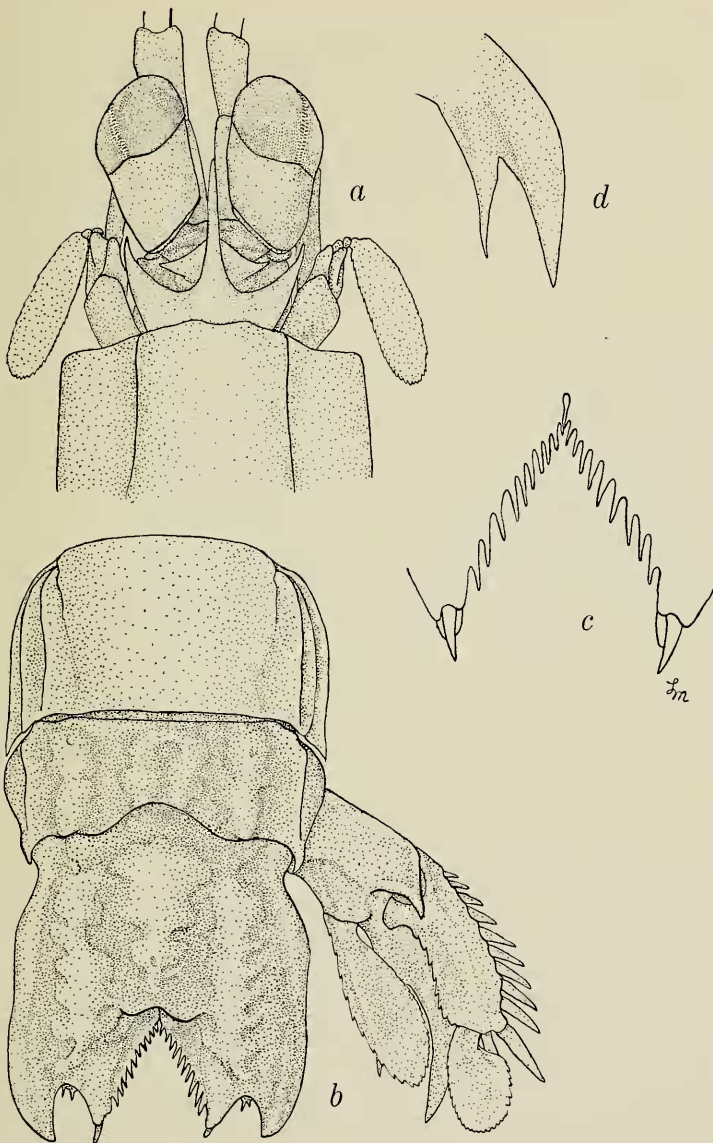


FIG. 2. *Chorisquilla pococki*, new species, ♀ paratype, Macclesfield Bank, South China Sea: *a*, Anterior portion of body; *b*, Posterior 2 abdominal somites, telson, and uropod; *c*, Outline of submedian denticles of telson, ventral view; *d*, Uropod, ventral view. (Setae omitted).

a distinct species. The characters that can be used to separate the two species are listed under the account of *C. excavata*.

Smaller specimens differ from the large male, TL 34 mm, in having more distinct carinae on the submedian and intermediate teeth of the telson (Fig. 1*b*) and in having more (9–10 rather than 7) submedian and intermediate (2 rather than 1) denticles on the telson. The sharp carina of the intermediate teeth merge with the marginal carinae in large specimens, but even in the largest male there is a faint sulcus where the carinae meet.

I have not seen the material reported from the Bonin Islands by Odhner (1923), but inasmuch as he mentions the posterolateral spine on the sixth abdominal somite and refers to Kemp's illustration (in which furrowed dorsal carinae are shown) I believe that his material should be identified with this species rather than with *C. excavata*.

Pocock (1893) recorded one specimen of this species; there are three specimens from Macclesfield Bank in his material which was deposited in the British Museum (Natural History). Hansen (1926) recorded three specimens, from "Siboga" stations 133, 282, and 299. The vial from station 299 was found to include a thalassinid, not a stomatopod. The stomatopod from station 299 may now be lost.

The species is named for R. I. Pocock.

Distribution: Hatsune-ure, Bonin Islands (Odhner, 1923); Macclesfield Bank, South China Sea, 26 fms (48 m) (Pocock, 1893); off Ampenan, Lombok, Indonesia, 13 fms (24 m) (Holthuis, 1941); off Lirung, Salibabu Island, Talaud Islands, Indonesia, 36 m (Hansen, 1926); off northeastern Timor, Portuguese Timor, 27–54 m (Hansen, 1926); and off Roti Island, Lesser Sunda Islands, Indonesia, 34 m (Hansen, 1926).

***Chorisquilla andamanica*, new species**

Figure 3

Gonodactylus excavatus.—Kemp, 1913: 187, pl. 10 figs. 122, 123.—Manning, 1969: 158 (listed).

Chorisquilla lenzi.—Manning, 1969: fig. 6 (error in figure legend).

Chorisquilla excavata.—Manning, 1969: 159 (key).

Material: Off Andaman Islands: 20 fms (37 m); "Investigator"; 2 ♂, 4 ♀ (♂, TL 18 mm, is holotype, others are paratypes); IM 9177/6 (1 ♂, TL 13 mm, paratype, USNM 143562).—Off Little Andaman Island; 10.5 fms (19 m); "Investigator"; paratypes, 1 ♂, 3 ♀, TL 16–26 mm; IM 9850-3/6.—Off Table Island, Coco group, Andaman Islands; 9.5 fms (17 m); "Investigator"; paratypes 1 ♂, 3 ♀, TL 13–16.5 mm; IM 9846-9/6.

Diagnosis: Fifth abdominal somite (Fig. 3*b*) smooth dorsally, with sharp posterolateral angles and 2 longitudinal grooves above margin. Sixth abdominal somite (Fig. 3*b*) with 3 pairs of dorsal bosses, smooth dorsally, none armed, margins of intermediates irregular in outline.

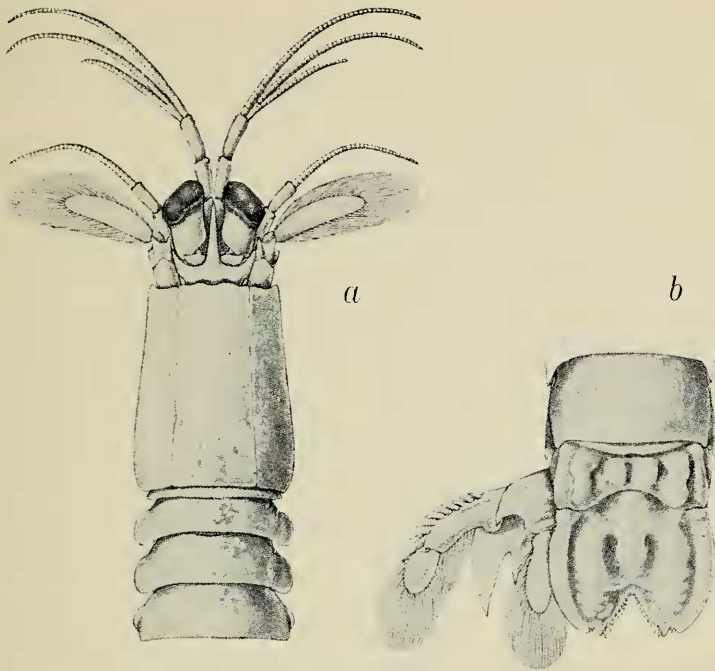


FIG. 3. *Chorisquilla andamanica*, new species (from Kemp, 1913, pl. 10 figs. 122, 123): *a*, Anterior part of body; *b*, Posterior 2 abdominal somites, telson, and uropod.

Telson (Fig. 3*b*) length and width subequal, appearing elongate, with 5 prominent longitudinal bosses, smooth dorsally, on dorsal surface, margins of median and submedians very irregular, eroded; submedians with smaller, separate lobe posteromesially. Median boss (Fig. 3*b*) of telson not extending to anterior margin of median posterior incision, separated from incision by transverse ridge extending from each dorsal submedian carina. Submedian bosses extending almost to bases of submedian teeth. Marginal bosses smooth, rounded dorsally, not furrowed laterally or mesially. Telson with 2 pairs of marginal teeth, separated by shallow incision, submedians extending slightly posterior to intermediates. Submedian tooth smooth dorsally, lacking distinct dorsal carina, apices acute but blunt, with movable, submarginal apical spine. Intermediate tooth, broader than submedian, apices blunt, obtuse. 11-12 slender submedian (Fig. 3*b*) and 2 slender intermediate denticles present. Uropodal exopod with 9-11 blunt, movable spines on outer margin of proximal segment.

Measurements: Kemp (1913) reported 14 specimens with total lengths ranging from 11.5 to 26 mm. Other measurements of a female, TL 18 mm, in mm: carapace length 2.7; cornea width 0.8; rostral plate length 1.2, width 1.3; antennal scale length 1.1; fifth abdominal somite width 2.1; telson length 2.3, width 2.1.

Remarks: *Chorisquilla andamanica* is very similar to both *C. excavata* and *C. pococki*, agreeing with the latter and differing from the former in having laterally eroded and irregular median and dorsal submedian bosses on the telson. It further agrees with *C. pococki* in having a relatively short median boss on the telson which does not extend to the anterior margin of the median incision. It differs from both species in lacking posterolateral spines on the sixth abdominal somite and in having much smaller marginal incisions between the submedian and intermediate marginal teeth.

Kemp's figure of this species is so good that I have decided to reproduce it here (Fig. 3) rather than have a new illustration prepared. It was also reproduced in Manning (1969, Fig. 6) where it was inadvertently labelled *Chorisquilla lenzi*.

The name is derived from the type-locality, the Andaman Islands.

Distribution: Known only from the Andaman Islands, in depths between 9.5 and 20 fms (17 and 37 m).

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